Amendments to the Specification

Replace the Title with the following:

~~A DATA STORAGE SYSTEM INCLUDING AN~~ OVERMOLDED INPUT/OUTPUT CONNECTOR

Replace paragraph [0009] with the following:

FIG. 3 is an enlarged section view of a disc drive in accordance with ~~an embodiment~~ embodiments of the present invention.

Replace paragraph [0011] with the following:

FIG. 5 is an enlarged section view of a disc drive in accordance with ~~an embodiment~~ embodiments of the present invention.

Replace paragraph [0012] with the following:

FIG. 6 is an enlarged section view of a disc drive in accordance with ~~an embodiment~~ embodiments of the present invention.

Replace paragraph [0016] with the following:

FIG. 1 also illustrates electrical connector 136. Electrical connector 136 provides an electronic interface between disc drive 100 and a central processor unit (not shown). Electrical connector 136 is an input/output connector that includes a plurality of conductive pins 138 which are configured to electrically connect with a ~~male~~ female connector of a central processor unit. Electrical connector 136 can be of any standard configuration. For example, electrical connector 136 is a standard SCSI connector.

Replace paragraphs [0018-0020] with the following:

Disc drive 200 can experience vibration or shock events that cause undesirable sliding between conductive pins 238 and its corresponding ~~male~~ female connector. Sliding contacts can cause intermittent changes in electrical resistance which detrimentally affect high-speed digital data transmission. Other miscellaneous motion of disc drive 200, such as motion during seek mode, can cause misalignment between enclosure 201 and electrical connector 236. To avoid sliding contacts, it is desirable to provide better retention of disc drive 200. In addition, it is desirable to improve the alignment tolerance of electrical connector 236 relative to enclosure 201. During assembly of disc drive 200, connector 236 is coupled to PCB 240 and then PCB 240 is mounted to disc drive 200 with screws. This method of assembly ~~causes a certain percentage of~~ can cause connectors to be placed out of alignment relative to disc drive 200. Thus, when the disc drive 200 is inserted into a cabinet in a central processing unit, the cabinet can deflect the ~~deflects~~ connector 236.

In some circumstances, applying a sustained force or load to electrical connector 236 provides better retention of disc drive 200. However, applying a sustained load to electrical connector 236 will not improve its alignment. In addition, electrical connector 236 is coupled to PCB 240 with solder joints which can have the tendency to creep under sustained loads. ~~Any cracking~~ Cracking or breaking of solder joints ~~will~~ can result in disc drive failure. Thus, the present invention provides an electrical connector overmolded to the enclosure of the disc drive such that the electrical connector has high structural rigidity to withstand a sustained load without compromising the electrical connection. The present invention also provides high precision connector alignment.

FIG. 3 is an enlarged section view of disc drive 300 in accordance with ~~an embodiment~~ embodiments of the present invention. Disc drive 300 includes enclosure 301, electrical connector 336 and PCB 340. Electrical connector 336 includes non-conductive connector housing 341 that has an inboard side 342, an opposing outboard side 344 and pin supporting wall 346 that extends the width of housing 341. A plurality of conductive pins 338 extend generally perpendicular from outboard side 344 of pin supporting wall 346 and are configured to electrically couple to a mating connector (not shown) of a central processing unit (not shown). A plurality of spring-like connector leads 348 extend from inboard side 342 of housing 341. To simplify the manufacturing process, each conductive pin 338 corresponds with a single conductor lead 348. On outboard side 344 of connector housing 336 are provided upper and lower pin enclosing walls 354 and 356.

Replace paragraphs [0022-0024] with the following:

FIG. 4 is a bottom perspective view of disc drive 300 in accordance with ~~an embodiment~~ embodiments of the present invention. Disc drive 300 includes PCB 340, which is configured to operate disc drive 300. FIG. 4 illustrates PCB 340 being directly mounted to outer surface 334 of enclosure 301 by fasteners 358. PCB 340 includes a plurality of contact pads 350 (shown in FIG. 3) that electrically couple with connector leads 348. Upon mounting PCB 340 to enclosure 301, fasteners 358 compress contact pads 350 against the spring-like connector leads 348 of electrical connector 336.

The compression connection between ~~contacts pad~~ contact pads 350 of PCB 340 and connector leads 348 is strong enough to eliminate use of solder joints. Thus, the compression connection provides precise alignment of electrical connector 336 and

overmold section 352 provides structural rigidity in order for electrical connector 336 to withstand a sustained load.

FIG. 5 is an enlarged section view of disc drive 500 in accordance with ~~another embodiment~~ other embodiments of the present invention. Disc drive 500 includes enclosure 501, electrical connector 536 and PCB 540. Electrical connector 536 is similar to electrical connector 336 of FIG. 3 and includes non-conductive connector housing 541 that has an inboard side 542, an opposing outboard side 544 and pin supporting wall 546 that extends the width of housing 541. Electrical ~~conducter~~ connector 536 has a plurality of conductive pins 538 that extend generally perpendicular from outboard side 544 of pin supporting wall 546 and are configured to electrically couple to a mating connector (not shown) of a central processing unit (not shown). A plurality of spring-like connector leads 548 extend from inboard side 542 of housing 541. Each conductive pin 538 corresponds with each conductor lead 548.

Replace paragraphs [0026-0030] with the following:

Although overmold section 552 provides structural rigidity such that electrical connector 536 can withstand a sustained load, overmold section 552 does not necessarily provide a high shear strength. Therefore, enclosure 501 includes at least one external feature 560 which protrudes from outer surface 534 into overmold section 552 and terminates at first end 559. External feature 560 includes side surface 561 and improves the shear strength of electrical connector 536. Those skilled in the art will recognize that external feature 560 can have a variety of different geometrical shapes. For example, in FIG. 5, external feature 560 has a cylindrical shape. External feature 560 can be formed

with enclosure 501 during the casting process. Thus, in this example, external feature 560 comprises the same material as enclosure 501. Generally, enclosure 501 is made of aluminum or other materials with similar properties.

FIG. 6 is an enlarged section view of disc drive 600 in accordance with ~~another embodiment~~ other embodiments of the present invention. Disc drive 600 includes enclosure 601, electrical connector 636 and PCB 640. Electrical connector 636 is similar to the electrical connectors discussed in previous embodiments and includes non-conductive connector housing 641 that has an inboard side 642, an opposing outboard side 644 and pin supporting wall 646 that extends the width of housing 641. Electrical ~~conducter~~ connector 636 has a plurality of conductive pins 638 that extend generally perpendicular from outboard side 644 of pin supporting wall 646 and are configured to electrically couple to a mating connector (not shown) of a central processing unit (not shown). A plurality of spring-like connector leads 648 extend from inboard side 642 of housing 641. Each conductive pin 638 corresponds with each conductor lead 648.

Electrical connector 636 is coupled to outer surface 634 of enclosure 601 by overmold section 652 as described in previous embodiments. PCB 640 is fastened to enclosure 601 with fasteners (not shown in FIG. 6) and includes contact pads 650. PCB is configured to operate disc drive 600 and electrically couple to electrical connector 636 through contact pads 650 and connector leads 648. The fasteners of PCB 640 compress contact pads 650 to the spring-like connector leads 648 of electrical connector 636 to form a compression connection void of solder joints. Enclosure 601 includes at least one external feature 660 which protrudes from outer surface 634 of enclosure 601 into overmold section 652 and terminates at first end ~~559~~ 659. External feature 660 includes side surface 661.

Although overmold section 652 provides structural rigidity such that electrical connector 536 can withstand a sustained load and external feature 660 provides shear strength, external feature 660 does not necessarily provide high vertical strength. Therefore, external feature 660 also includes at least one notch 662 to improve the vertical strength of electrical connector 636. Notch 662 is located on side surface 661. As shown in FIG. 6, notch 662 is formed on the bottom of side surface 661 of external feature 660. Those skilled in the art will recognize that notch 662 can be located in other areas of external feature 660 as well as formed circumferentially about external feature 660. Notch 662 can be formed with enclosure 601 during the casting process or can be formed by machining the external feature prior to forming overmold section 652.

It is to be understood that even though numerous characteristics and advantages of various embodiments of the invention have been set forth in the foregoing description, together with details of the structure and function of various embodiments of the invention, this disclosure is illustrative only, and changes may be made in detail, especially in matters of structure and arrangement of parts within the principles of the present invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed. For example, the particular elements may vary depending on the particular application for the apparatus while maintaining substantially the same functionality without departing from the scope and spirit of the present invention. In addition, although the preferred ~~embodiment~~ embodiments described herein ~~is~~ are directed to a storage apparatus for electrically connecting to a central processor unit, it will be appreciated by those skilled in the art that the teachings of the present invention can be

applied to other electrical connections, without departing from the scope and spirit of the present invention.